

### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed on September 28, 2007 ("Office Action"). Claims 1-3 and 5-31 are pending in the Application and stand rejected. Applicants respectfully request reconsideration and favorable action in this case.

#### Section 101 Rejections

The Office Action maintains the rejections of Claims 1-3 and 5-31 under 35 U.S.C. § 101 for containing nonstatutory subject matter. Applicants continue to traverse the § 101 rejections maintained from the prior Office Actions and respectfully submit that the rejections are improper.

First, the rejections are in direct contrast to the statutory test outlined in the M.P.E.P. Specifically, the M.P.E.P. makes clear that "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." M.P.E.P. § 2106.01(I). In this instance, the current claims, such as example Claim 1, recite "software comprising instructions stored in a computer readable medium." To be clear, "[o]nly when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." *Id.* § 2106. As such, the present claims are statutory and the improper rejection should be withdrawn.

Moreover, the previous amendments made to independent Claims 1, 25, and 29 further provide for a practical application with a useful, concrete, and tangible result. The patent laws define patentable subject matter as "any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereto." 35 U.S.C. § 101. When an abstract idea is reduced to a practical application, the abstract idea no longer stands alone if the practical application of the abstract idea produces a useful, concrete and tangible result and satisfies the requirements of 35 U.S.C. § 101. *See In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994); *see also State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1375 (Fed. Cir. 1998); *AT&T Corp. v. Excel Comm. Inc.*, 172 F.3d 1352, 1357 (Fed. Cir. 1999) (stating that as technology progressed, the C.C.P.A. overturned some of the earlier limiting

principles regarding § 101 and announced more expansive principles formulated with computer technology in mind); *see also In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970) (cited by the Federal Circuit in *AT&T Corp.*, 172 F.3d at 1356). Indeed, a method or process remains statutory even if some or all of the steps therein can be performed in the human mind, with the aid of the human mind, or because it may be necessary for one performing the method or process to think. *See In re Musgrave*, 431 F.2d at 893. Thus, producing a useful, concrete, and tangible result is the key to patentability according to *State Street* and other applicable case law. Applicants respectfully submit that, for example, Claim 1 produces a useful, concrete, and tangible result via “persisting the modified business solution for subsequent presentation through a graphical user interface.”

Moreover, the Office Action improperly suggests that the Application fails to disclose any utility or practical application. First, the Office Action fails to analyze the claims – which outline the invention – with respect to utility or practical application and instead selectively (and incorrectly) cites permissive language from the specification as supposed evidence of lack of utility. The Office Action then suggests some limiting language that could be used to demonstrate utility. But Applicants respectfully reject this approach because the permissive language merely demonstrates the breadth of the utility, not the supposed lack of such utility. Regardless, Applicants respectfully assert that the claims are directed to a useful and practical application and that one of ordinary skill in the art would recognize the specific and practical utility upon viewing the claims. It is well known that an “invention has a well-established utility if (i) a person of ordinary skill in the art would immediately appreciate why the invention is useful based on the characteristics of the invention (e.g., properties or applications of a product or process), and (ii) the utility is specific, substantial, and credible.” M.P.E.P. § 2107(II)(A)(3). Based on the foregoing, the invention, which is defined in the claims, has a well-established and immediately apparent utility.

Applicants respectfully submit that the rejection of Claims 1-3 and 5-31 under § 101 are improper and should be withdrawn.

### **Objection to Permissive Language**

The Office Action maintains the previous objection to the use of permissive language, such as the word “may” in describing certain aspects of the subject matter within the specification. *See* Office Action at ¶ 20; *id.* at 5 (“This does not describe the characteristics of a ‘technology object’, in addition, the word ‘may’ is in the paragraph 0053 indicating that it ‘may’ be something else as well.”) This is wrong. The use of the term “may” in the specification does not justify a rejection under 35 U.S.C. § 112. Moreover, the suggestion in the Office Action that the specification must make clear “the metes and bounds of what applicant considers unique to the invention” is inappropriate. The use of this term in the specification merely indicates that the described embodiments serve as examples – it is the claims that set forth the “invention.” For example, the term “may” has been used in the present Application in the same manner as in numerous issued patents; *see e.g.*, U.S. Patent No. 6,339,832 to Bowman (“*Bowman*”) at 2:25-27 (“In an aspect of the present invention, a typical response and a last resort response *may* be listed in the exception response table.”) (emphasis added). If the Examiner would like to see additional examples of such issued patents, these can be provided. Thus, use of the term “may” does not create a problem under § 112 in the present Application and Applicants request that all rejections or assertions based on this incorrect proposition be withdrawn.

### **Section 112 Rejections**

The Office Action maintains the rejections of Claims 1-3, 6-21, 25, and 27-31 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully reassert the previous traversals of the maintained rejections and all the assertions and holdings therein. Indeed, Applicants continue to assert that each listed term is more than sufficiently described and supported within the Application.

The M.P.E.P. makes it explicitly clear that rejections of originally filed claims under the written description requirement should be rare. *See* M.P.E.P. § 2163.03. Specifically, “[w]hile a question as to whether a specification provides an adequate written description may arise in the context of an original claim which is not described sufficiently, there is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed. *In re Wertheim*, 541 F.2d 257, 262 (C.C.P.A. 1976).” *Id.* (internal citations omitted). Applicants

respectfully note that thirteen maintained rejections under the written description requirement of § 112 do not appear to be 'rare' as cautioned by the M.P.E.P. Indeed, Applicants respectfully suggest that the Office Action appears to have failed to give due weight to the "strong presumption" of written description support that original claims enjoy under the M.P.E.P. and the patent laws.

Further, as noted previously, it is well settled that the written description requirement of § 112 is satisfied when the specification describes the claimed invention in sufficient detail so that one of ordinary skill in the art can reasonably conclude that the inventors had in their possession the claimed invention. *See* M.P.E.P. § 2163 (citing *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)).<sup>1</sup> Importantly, the claimed subject matter "need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement." *Id.* § 2163.02. With this in mind, Applicants respectfully reassert that one of ordinary skill in the art would reasonably conclude that Applicants had possession of the claimed subject matter, thereby satisfying the written description requirement, particularly for each term indicated by the Office Action.

Specifically, Applicants submit that the noted phrases are clear, concise and exact, and dispute the assertions that the phrases are in any way unclear, inexact, indefinite, or do not fully and clearly describe and support the claimed subject matter. Also, saying that something "may" merely provides the permissive nature of the attribute that "may" be. To be clear, Applicants are

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<sup>1</sup> Even more instructive is the M.P.E.P.'s examples of typical situations in which a written description rejection may arise for original claims. For example, in accordance with § 2163(A), such a rejection may arise "if the claims require an essential or critical feature which is not adequately described in the specification and which is not conventional in the art or known to one of ordinary skill in the art." M.P.E.P. § 2163(A). Additionally, such a rejection may arise "where an invention is described solely in terms of a method of its making coupled with its function and there is no described or art-recognized correlation or relationship between the structure of the invention and its function." *Id.* Finally, such a rejection may arise "if the knowledge and level of skill in the art would not permit one skilled in the art to immediately envisage the product claimed from the disclosed process." *Id.* Applicants respectfully submit that none of the foregoing situations envisioned in the M.P.E.P. as supportive of a written description rejection of an original claim appear present in this Office Action or Application.

still unaware of any support for this rejection and again request that the Examiner either (a) provide such support or (b) withdraw this rejection.<sup>2</sup>

Applicants have again provided references below to select portions of this Application that describe examples of the particular claim term. Applicants provide these references for the purpose of expediting prosecution of the Application only, without limiting the meaning of the claims, and submit that additional portions of the Application can provide similar examples and description.

- Claims 21 and 31 (“solution template”) – for example, Applicants direct the Examiner to [0088] and [00266] of the Application.
- Claims 1, 3, 7, 15, 20, 21, 25, 28, 29, 30 (“technology object”) – for example, Applicants direct the Examiner to [0053] and [00281]-[00288] of the Application.
- Claims 1, 2, 25 (“first” and “second data repository”) – for example, Applicants direct the Examiner to Fig. 3B of the Application.
- Claims 1, 3, 6, 21, 29 (“business object”) – for example, Applicants direct the Examiner to [0053], [00272]-[00278], [00488] and [00722] of the Application.
- Claim 8 (“select” a “business solution”) – for example, Applicants direct the Examiner to [0009], [0079] and [00161] of the Application.
- Claim 9 (“maintain and modify a knowledge base”) – for example, Applicants direct the Examiner to [0063], [0068] and [0075]-[0076] of the Application.
- Claim 10 (“maintain and modify a project”) – for example, Applicants direct the Examiner to [0084]-[0085] and [0088] of the Application.
- Claim 11 (“maintain and modify an integrated implementation”) – for example, Applicants direct the Examiner to [0087] and [00525]-[00526] of the Application.

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<sup>2</sup> Applicants note again that it appears that Claims 2, 3, 5-24, 26-28, 30, and 31 stand rejected solely under 35 U.S.C. §§ 101 and 112. Accordingly, Applicants again respectfully request an indication from the Examiner that these claims would be allowable if rewritten in independent form, at least in view of the foregoing remarks.

- Claims 2, 8, 10-14, 16, 17 (“repository layer”) – for example, Applicants direct the Examiner to [0056] and [0059] of the Application.
- Claim 16 (“technology component identifier”) – for example, Applicants direct the Examiner to [0073] and [0080]-[0081] of the Application.
- Claims 17 and 19 (“solution determination structures”) – for example, Applicants direct the Examiner to [00146] and [00148] of the Application.
- Claim 27 (“plurality of solution determination structures”) – for example, Applicants direct the Examiner to Fig. 9, [0075] and [00249] of the Application.

### **Section 102 Rejection**

The Office Action maintains the rejection of Claim 29 under 35 U.S.C. § 102(b) as being anticipated by “*UML Distilled: A Brief Guide to the Standard Object Modeling Language*” by Fowler (“*Fowler*”).<sup>3</sup> Applicants respectfully reassert the previous traversals to this rejection and all the assertions and holdings therein,<sup>4</sup> because *Fowler* fails to teach, suggest, or disclose each and every element of Claim 29 as required. *See* M.P.E.P. § 2131.

As Applicants noted previously, *Fowler* fails to teach “prompting the user to select at least one instantiated business process object and one instantiated technology object,” as recited by Claim 29. The Office Action still relies on *Fowler*’s disclosure of a “structural feature” and a “behavioral feature” to reject the claimed instantiated technology object and instantiated business process object, respectively. *See* Office Action at 11. Applicants note that *Fowler* generally describes the Unified Modeling Language (UML) and its capabilities. *See generally Fowler*. UML is a standardized specification language for object modeling used, for example, to create an abstract model of a system. Accordingly, there is no indication in *Fowler* that these “features”

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<sup>3</sup> While the current Office Action purports to incorporate prior Office Actions, this Office Action further states that “The applicant’s [sic] arguments are always considered and the Examiner felt that Bowman was a good reference, the current references are a better fit.” Applicants again read this statement, as well as the Office Action’s reliance on new references, to mean that the previous responses were successful in traversing the *Bowman* reference. If Applicants’ reading of the current Office Action is incorrect in this regard, Applicants respectfully request the Examiner to notify the Applicants immediately to clarify the foregoing statement in the Office Action and to discuss any rejections maintained under the *Bowman* reference.

<sup>4</sup> Further, Applicants reassert the previous responses to the various references in the prior Office Actions.

are, in fact, “objects,” to say nothing of “instantiated objects.” More particularly, *Fowler* describes “structural” and “behavioral features” in the context of a UML meta-model, *i.e.*, a diagram that describes a notation. *See id.* at 4, Fig. 1-1. Applicants respectfully submit that neither the description of the UML meta-model in *Fowler*, nor the figure illustrating such a meta-model, teach, suggest, or describe a “business process object” or a “technology object,” instantiated or otherwise.<sup>5</sup>

As another example, *Fowler* further fails to teach “maintaining and modifying the business solution,” as recited by Claim 29. The Office Action asserts that “objects that are set up and then left alone” in *Fowler*, thereby disclosing “maintaining and modifying the business solution.” *See* Office Action at 11. Putting aside that there is no indication that the features (the so-called “objects”) in *Fowler* are analogous to the claimed “business solution,” *Fowler* expressly notes that objects are “not modified often, and when they are, *we can create them again.*” *Fowler* at 8 (emphasis added). In short, rather than teaching that the business solution may be modified as the Office Action asserts, *Fowler* indicates that the few objects that are modified are created anew.

For at least the foregoing reasons, Applicants respectfully request the rejection of Claim 29 in view of *Fowler* be withdrawn and that this claim and those depending therefrom be reconsidered and allowed.<sup>6</sup>

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<sup>5</sup> An “instantiated business process object” and an “instantiated technology object” are two distinct aspects of a business solution management system, method, or software, each describing distinct components of the business solution. *See, e.g.*, Application at [0053]. In contrast, Fig 1-1 of *Fowler* appears to indicate that both the “behavioral feature” and the “structural feature” are sub-components of a “feature,” *i.e.*, they do not describe distinct components of a business solution (even assuming *arguendo* that *Fowler* teaches, suggests, or discloses a business solution, which Applicants dispute).

<sup>6</sup> Applicants respectfully traverse the Office Action’s assertion that claims may be interpreted in their broadest reasonable sense. *See* Office Action at 53-54, ¶¶ 26-27. Applicants resubmit that claims must be read in “light of the specification as it would be interpreted by one of ordinary skill in the art.” M.P.E.P. § 2111 (quoting *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)). In other words, “[t]he broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” M.P.E.P. § 2111 (citing *In re Corright*, 165 F.3d 1353, 1359 (Fed. Cir. 1999)).

### **Section 103 Rejections**

The Office Action maintains the rejections of Claims 1 and 25 under 35 U.S.C. § 103(a) as being unpatentable over *Fowler* in view of U.S. Patent Publication No. 2002/0174005 to Chappel ("*Chappel*"). Applicants again respectfully traverse the rejections and all the assertions and holdings therein. Specifically, *Chappel* fails to account for the deficiencies in *Fowler* described above with regard to certain aspects in amended Claims 1 and 25 that are analogous to those in Claim 29, such as "business process objects" and "technology objects."<sup>7</sup> *Chappel* describes a use of statistical modeling and rules-based analysis methods to plan a business operation. *See Chappel* at [0020]-[0021]. *Chappel* further describes two databases, a source database 140 and rules database 145, to store business data and predetermined rules, respectively. *See id.* at [0025]. The Office Action seems to compare *Chappel's* source database 140 and rules database 145 to the claimed first and second data repositories, respectively. But *Chappel's* mere showing of some database, indeed even two databases, simply does not address the full language of the claimed repositories, namely, "a first data repository comprising the instantiated user-selectable, pre-defined business objects" and "a second data repository comprising the instantiated user-selectable, pre-defined technology objects," as recited by example Claim 1. For example, *Chappel* teaches that the rules database stores "predetermined rules used to process or analyze results from the statistical analysis performed by the software tools." *Id.* Further, *Chappel* teaches that the rules database "may include additional knowledge, facts and assertions, that is [sic] generated by the software tools." *Id.* Put another way, *Chappel's* source database is not "a first data repository comprising the instantiated user-selectable, pre-defined business objects" and *Chappel's* rules database is not "a second data repository comprising the instantiated user-selectable, pre-defined technology objects."

Accordingly, Applicants respectfully request reconsideration and allowance of amended Claim 1 and all claims depending therefrom. Claim 25, as amended, includes certain aspects

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<sup>7</sup> Further. Applicants respectfully traverse the Office Action's assertion that the "software" of Applicants, as recited in Claims 1 and 25, is equivalent to the Unified Modeling Language (UML). *See* Office Action at 12. As noted above in response to the rejection based on § 102, Applicants again submit that UML is not software but a standardized specification language for object modeling used, for example, to create an abstract model of a system.



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analogous to Claim 1. Therefore, Applicants respectfully request reconsideration and allowance of Claim 25 and all claims depending therefrom.<sup>8</sup>

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<sup>8</sup> Applicants respectfully assert that U.S. Patent No. 6,339,832 to Bowman fails to account for the deficiencies in *Fowler* and *Chappel* with regard to independent Claims 1 and 25.

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### CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all Claims.

**If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.**

Applicants believe that no fees are due. If this is incorrect, please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: December 28, 2007

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